This application is a continuation of PCT/US98/20737 filed October 1, 1998 which is a continuation-in-part of U.S. Patent Application No. 08/942,596 filed October 2, 1997.

IN THE CLAIMS:

Please cancel non-elected claims 1-20, 23-31 and 38-41 without prejudice.

Please amend 21, 32, 33, 35-37 to read as set forth below:

21. (Once Amended) A method of producing an immune response in an animal comprising administering to said animal an effective amount of an antigenic composition comprising an isolated *Chlamydia* species high molecular weight (HMW) protein wherein the apparent molecular weight is about 105-115 kDa, as determined by sodium dodecylsulfate-polyacrylamide gel electrophoresis (SDS-PAGE), wherein the *Chlamydia* species is *Chlamydia* trachomatis, *Chlamydia* pecorum, or *Chlamydia* pneumoniae, or an analogue of the HMW protein wherein the analogue has an apparent molecular weight of about 105-115 kDa, as determined by SDS-PAGE and is recognizable by an antibody that specifically binds to a peptide comprising an amino acid sequence of SEQ ID No. 2, 15 or 16.

32. (Once Amended) A method of preventing, treating or ameliorating a disorder related to *Chlamydia* in a host in need thereof comprising administering to a host, an effective amount of a pharmaceutical composition or vaccine composition comprising an isolated *Chlamydia* species high molecular weight (HMW) protein wherein the apparent molecular weight is about 105-115 kDa, as determined by sodium dodecylsulfate-polyacrylamide gel electrophoresis (SDS-PAGE), wherein the *Chlamydia* species is *Chlamydia* trachomatis, *Chlamydia* pecorum, or *Chlamydia* pneumoniae, or an analogue of the HMW protein wherein the analogue has an apparent molecular weight of about 105-115 kDa, as determined by SDS-PAGE and is recognizable by an antibody that specifically binds to a peptide comprising an amino acid sequence of SEQ ID No. 2, 15 or 16 or a fragment of said HMW wherein the fragment is recognizable by an antibody that specifically binds to a peptide comprising an amino acid sequence of SEQ ID No. 2, 15 or 16 or a recombinant protein comprising a Chlamydia protein and a leader sequence, wherein the apparent

molecular weight of said protein is about 105-115 kDa as determined by sodium dodecylsulfate-polyacrylamide gel electrophoresis.

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33. (Once Amended) The method of claim 32, wherein the disorder is selected from the group consisting of conjunctivitis, urethritis, lymphogranuloma venereum (LGV), cervicitis, epididymitis, endometritis, pelvic inflammatory disease (PID), salpingitis, tubal occlusion, infertility, cervical cancer, arteriosclerosis and atherosclerosis.

35. (Once Amended) The method of claim 32, in which the composition is formulated for *in vivo* administration to a host to confer protection against disease caused by a species of *Chlamydia*.

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36. (Once Amended) The method of any one of claims 32, 33 or 35 wherein the disorder is associated with a *Chlamydia* species selected from the group consisting of *Chlamydia* trachomatis, *Chlamydia* pecorum, *Chlamydia* psittaci and *Chlamydia* pneumoniae.

37. (Once Amended) The method of claim 32, in which the pharmaceutical composition is formulated as a microparticle, capsule, or liposome preparation.

Please add new claims 42-47 as follows:

--42. The method of claim 32, wherein the fragment consists of seven to fifty amino acids of the HMW protein and is recognizable by an antibody that specifically binds to a peptide comprising an amino acid square of SEQ. ID. No. 2, 15 or 16.

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43. The method of claim 32, wherein the fragment comprises an amino acid sequence shown in SEQ ID No. 3, 17, or 25-37 and is recognizable by an antibody that specifically binds to a peptide comprising an amino acid square of SEQ. ID. No. 2, 15 or 16.

44. A method of preventing, treating or ameliorating a disorder related to *Chlamydia* in a host in need thereof comprising administering to a host, an effective amount of a pharmaceutical composition comprising an isolated *Chlamydia* species HMW protein